

## ABSTRACT

The present invention is a hearing aid for amplifying an acoustic signals comprising: a controller for determining in real time a frequency band at the highest level of the acoustic signals through frequency analysis of the acoustic signals that vary over time, and for generating a control signal to raise a gain for signals of a higher frequency range than the frequency band at the highest level (such as an amplifier Q3, or a band-pass filter group 2 and a diode matrix 3 and a comparator 4, or a digital signal processor 13, or the like); and a first amplifier, in which the control signal from said controller is inputted so that the frequency characteristics are varied, for amplifying the acoustic signals by increasing the gain for signals of the higher frequency range than the frequency band at the highest level (such as an amplifier system consisting of amplifiers Q1 and Q2, or a parametric equalizer 5, or a digital signal processor 13, or the like). According to the present invention, the hearing aid can amplify a second formant signal without amplifying a first formant signal so that the output sound becomes clearer and not loud.